

State Agency Energy Management Bulletin

Information for
Agency Energy Managers
and FASER Users at
Virginia State Agencies

A New Name Already?

Only the third issue of this publication and already the name has changed from *Energy Information Bulletin* to *Energy Management Bulletin*. The change is minor, but we believe the new name better communicates the intent of this bulletin. After all, energy management is what it is all about. We will continue to provide what we hope will be useful energy information to agencies to help them better manage and reduce their facility energy cost and consumption.

This issue's feature article deals with the importance of comprehensive agency energy management plans, and how they can help state agencies achieve their energy reduction goals. Over 48 agencies have submitted new or updated agency energy management plans to the Department of Mines, Minerals and Energy. We hope this information is helpful to agencies which are still in the process of developing their energy management plans.

We would like your comments about this bulletin, as well as any energy related information you would like included in future issues. Please call Ken Jurman at (804) 692-3230 or e-mail: ksj@mme.state.va.us. ♦

Energy Management Planning for State Agencies

One of the most important tools state agencies are using to achieve the Virginia Energy Plan's goal of a 25% reduction in energy cost and consumption is the agency energy management plan. Under the 1997 Virginia Energy Plan (Executive Memorandum 97-1), each agency is responsible for developing and implementing an agency specific energy management plan. These plans outline the agency's goals, objectives, and strategies for saving energy.

The **energy management plan**, which details a systematic approach to energy management activities, benefits Virginia state agencies by:

- **Prioritizing and planning for energy efficiency improvements** - The agency energy management plan is an opportunity to develop a prioritized list of energy improvements and to plan the approach for imple-

menting these projects. For example, strategies may specify that lighting upgrades will be completed in the hallways using maintenance reserve funds before controls are added on the HVAC system.

- **Coordinating agency efforts** - If the human resources office is coordinating ridesharing and the fiscal office monitors recycling, then the agency energy management plan provides the umbrella to organize and track these efforts. It also may help point out where efforts are duplicated or working at cross purposes.
- **Demonstrating the agency's commitment** - Development and implementation of an agency energy management plan shows your agency's dedication to good stewardship of the Commonwealth's resources.
- **Educating Employees** - The agency energy management plan outlines employee behavior modification strategies that will help reduce energy consumption. This is especially important in leased space to insure that energy efficiency improvements made by landlords are not undermined by employees.
- **Using Division of Energy services to meet the agency's energy reduction goals** - The agency energy management plan is a tool for positioning the agency to take advantage of DMME, Division of Energy services. For example, by prioritizing the agency's energy efficiency improvements, you will be better prepared to apply for grant funding from the Division of Energy should it become available.

The Division of Energy offers help to make development of agency energy management plans easy for state agencies. **Available assistance includes:**

- Sample agency energy management plans;
- Examples of good strategies from other agency's plans (see "Strategies Worth Copying" on page 2);
- Plan review and suggestions for improvement; and
- Consultations and referrals for more information on topics in your plan, such as renewable energy, monitoring energy consumption, and financing energy efficiency and upgrade projects.

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We will be contacting those agencies that have not yet submitted plans to offer our assistance in the next few weeks. We look forward to working with you to develop a plan that will meet the needs of your agency and help to achieve the energy reduction goals of the Commonwealth.

Agency Energy Management Planning Strategies Worth Copying

Below are just some of the strategies from recently submitted agency energy management plans that are especially innovative. You may want to consider incorporating similar strategies in your agency's energy management plan. If you would like feedback on particular strategies you are considering for your plan, please contact Kendra Shifflett at (804) 692-3230 or e-mail: kbs@mme.state.va.us.

Department of Criminal Justice Services:

"Aluminum can recycling proceeds will go toward the 'Sunshine Fund for Employees'."

Department of Education:

"The description of 'scope of services' in RFP's or IFB's will include stipulations that monthly reports from vendors will be printed on recycled paper; meetings will be held via teleconference; and copies of printed material are double-sided."

"Equipment specifications should include energy consumption data for comparison."

"Keep refrigerator freezers defrosted and coils vacuumed."

"Consider the use of surplus products (furniture and office equipment) when appropriate."

Woodrow Wilson Rehabilitation Center:

"Director shall support the goals, objectives, and strategies of the energy management plan and energy management committee through semiannual communications to staff, vendors, and contractors, reinforcing the agency's commitment to energy conservation."

Department of State Police:

"Fleet management program will stress the recycling of used tires, batteries, and oil."

Virginia School for the Deaf and Blind at Staunton:

"A cost recovery fee will be charged to outside organizations for use of facilities that results in an increase in energy usage."

Look for more "Strategies Worth Copying" in future issues of this bulletin.

Master Equipment Lease Financing Now Available for Energy Projects

The **Master Equipment Lease Program (MELP)** provides state agencies with a special source of financing for the purchase of equipment and energy projects. The MELP, which is administered by the Department of Treasury in coordination with the Department of Mines, Minerals and Energy, is funded by a master lease held by a lending institution and the Commonwealth. The program was originally established to allow for credit purchases of **equipment only**, such as photocopiers or computers, and requires agencies to pay all related costs, such as shipping, handling, and installation. Recent amendments to the MELP, however, now also allow agencies to finance **energy efficiency projects** which can result in energy and dollar savings for the Commonwealth. Cost effective energy projects can include the installation of various energy-related equipment and systems, improvements to electrical, lighting and auxiliary systems, heating, ventilating, and air conditioning (HVAC) systems, or building envelope improvements. In addition, these amendments to the MELP also allow agencies to **finance the cost of services relating to the energy project**, such as analysis, design, installation, training, and monitoring of such equipment or systems. Credit purchases must equal or exceed \$10,000 in value, be used for essential government purposes, and involve repayment terms of 3 to 7 years. To request MELP financing for energy projects, an agency must present its proposal to the Department of Mines, Minerals and Energy. The proposal should outline the scope of work for the energy project, cost estimates, estimated annual energy savings, a projected time line for the project, and the simple payback or life cycle cost, if applicable. DMME will coordinate with the Department of Treasury to finance the project at the most favorable credit terms available to the Commonwealth. For more information about energy project financing using the MELP, contact Robin Jones at (804) 692-3224 or e-mail: crj@mme.state.va.us. ❖

Continued Lighting Upgrade Success

The latest *snapshot* from the EPA Green Lights program shows that the Commonwealth has surveyed 18% of facility square footage for lighting efficiency improvements and upgraded 10%, since 1993. This has resulted in an electricity reduction of 14 million kilowatt hours.

Some agencies have completed additional lighting upgrades which have not been included in our report. Starting in January, the semiannual **agency energy management report** (see page 4) includes a two-page lighting upgrade project summary form. Please fill out this form for all lighting upgrades not previously reported, so we can track these high return on investment efficiency improvements. ❖

Speaking of Lighting Upgrade Successes...

Students and faculty at John Tyler Community College (JTCC) are enjoying improved lighting quality, increased productivity and the satisfaction of conserving energy resources and the environment thanks to a lighting upgrade project completed in three buildings at their Chester, Virginia campus. Under a *State Agency Energy Efficiency Program* grant, energy efficient lighting technologies were installed in Bird Hall, Godwin Hall, and Moyar Hall. This project resulted in the upgrade of nearly 110,000 square feet of facility floor area at a cost of \$107,833, with an estimated annual savings of \$23,539. The estimated simple payback for this efficiency upgrade project is only 4.58 years.

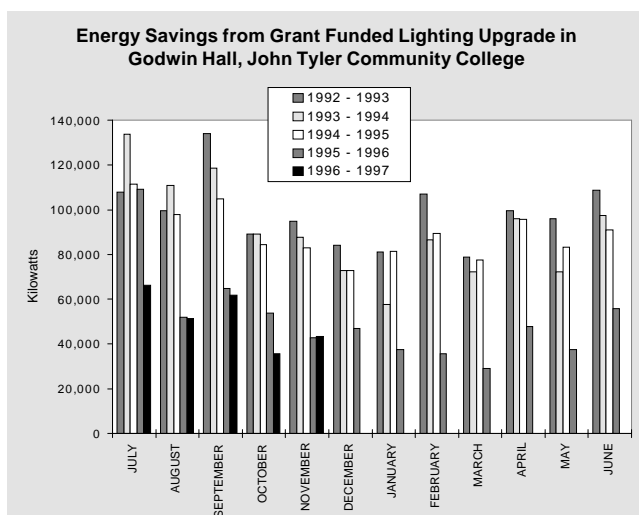


Figure 1 - Example of energy savings from lighting upgrades

The JTCC project is an excellent example of a comprehensive lighting upgrade project. The first step was a room-by-room survey of the lighting system. The engineers studied the layout of the current fixtures, what the space is used for, and the lighting quality characteristics, such as light levels, glare, and color rendition. They then designed the new system using energy efficient technologies which reduced energy consumption, while improving the lighting quality. The upgrades included T-8 fluorescent fixtures with electronic ballast (some with low power ballast), compact fluorescent fixtures, and occupancy sensors.

As part of the lighting project, JTCC installed submeters for each of the upgraded facilities. Used in conjunction with the FASER energy accounting system, the submeters allow the facility manager to track the energy saving performance of the new lighting system. **Figure 1** shows the savings achieved at one facility.

Representatives from DMME and the U.S. Department of Energy met with the staff at JTCC to assess the lighting upgrade project and were impressed by the quality of the work, as well as the dedication of the JTCC staff. Mary Buchanan, Director of Facility Planning and Development at JTCC, indicated there were no major problems with the performance of the lighting upgrades, and that the minor problems were resolved with assistance from the contractor and the contract engineering firm.

The University of Virginia (UVA) is a winner in the race for energy efficiency. Last year, the University won the bronze medal at the *Green Lights Summer Games*. Although the Summer Games are over, UVA's commitment to energy efficiency is not slowing down. Energy Program Manager Anthony Motto attests that the goal is to upgrade 300,000 to 400,000 square feet each year. UVA's progress is impressive – it is nearing the 30 percent mark for upgrades made so far.

UVA is also active in promoting energy efficiency around campus. The energy-efficiency newsletter, "*Watts Happening*," is published monthly to raise awareness, and the University is gearing up for its third annual Energy Awareness Days – a two-day energy-efficiency fair complete with electric cars, recycling tips, and energy vendors. At UVA, the message is clear: everyone is a winner with energy efficiency. ❖ Reprinted from

the Summer, 1997 *EPA Energy Star® Buildings & Green Lights® Update*.

Agency Energy Management Plan Reporting

The first reports under the revised Virginia Energy Plan (VEP) are due to DMME on **January 15, 1998**. In response to comments from agency energy managers, the reporting format has been changed to be easier to use and to provide more quantifiable data. Here are some frequently asked questions and answers which will provide more information about the new reporting form:

What's different about reporting under the revised VEP?

First, the reporting format has been standardized to make measuring and tracking progress over time easier. Second, the reporting period has changed. The reports will be made semiannually this year (FY98) and annually thereafter (in July each year).

What is the information in the report used for?

Most importantly, the information is used to provide feedback to your agency on the progress of your energy conservation initiatives and the progress made toward our goal of

a 25% reduction in energy cost and consumption. The reports are also compiled in a report to the Secretary of Commerce and Trade, as required by the Virginia Energy Plan.

How do I submit my report?

The reporting form can be found in **Section 9** (Agency Energy Management Plan Reporting) of the *Agency Energy Management Resource Guide*. The completed report should be submitted to DMME by January 15, 1998. We are working to make the report form accessible on the Internet so that you can submit it electronically. Electronic submission will be available for the July 1998 report.

What if I have any additional questions or need assistance completing the form?

Contact Kendra Shifflett at (804) 692-3230 or via e-mail: kbs@mme.state.va.us. ☒

Please note: DMME makes no warranty or assumes any liability for the success or failure of energy conservation products or procedures described in this Bulletin. References to specific products or services should not be construed as endorsements. Please use your best judgement.



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Please file this Bulletin in **Section 10**
of your *Agency Energy Management*
Resource Guide